Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A battery charger that is modular and reconfigurable and provides flexible, multi-port rapid charging, and selectable output capabilities, the battery charger comprising:

a base module providing DC power charging voltage, the base module including a power converter and providing output voltage for charging a battery, wherein each base module includes a transformer, an inverter, and a rectifier; and

a master controller that interfaces with a plurality of the base modules to regulate power delivered by each base module to charge a battery, wherein at least two of the plurality of base modules can be connected in parallel and regulated to charge the same battery.

2. (Canceled)

3. (Currently amended) The battery charger of claim 1, ~~A battery charger that is modular and reconfigurable and provides flexible, multi-port rapid charging, and selectable output capabilities, the battery charger comprising:~~

~~base modules providing DC power charging voltage, each base module of the base modules including a power converter and providing output voltage for charging a battery, wherein each base module includes an intermediate high frequency transformer; and~~

~~a master controller that interfaces with the base modules to regulate power delivered by each base module,~~ wherein the base ~~modules~~ module further comprises a slave microprocessor controller with which the master controller communicates in a call and response communication format.

4. (Original) The battery charger of claim 3, wherein the slave microprocessor controller sets current and voltage commands based on communications from the master controller.

5. (Original) The battery charger of claim 3, wherein the master controller auto-configures current and power rating of the charger based on the number of base modules connected and detected.

6. (Original) The battery charger of claim 5, wherein the auto-configuration operation comprises an enumeration procedure that determines how many base modules are connected.

7. (Currently amended) The batter charger of claim [[3]] 1, wherein ~~the base modules further comprise an inverter,~~ the inverter ~~comprising~~ comprises a switch.

8. (Currently amended) The battery charger of claim [[3]] 1, wherein ~~the base modules further comprise an inverter,~~ the inverter ~~comprising~~ comprises four switches.

9. (Currently amended) The battery charger of claim [[3]] 1, wherein ~~the base modules further comprise an inverter,~~ the inverter ~~comprising~~ comprises a bridge topology selected from the group consisting of ~~forward,~~ a half bridge[[,]] and a full bridge.

10. (Currently amended) The battery charger of claim [[3]] 1, wherein ~~the base modules further comprise an inverter,~~ the inverter ~~comprising~~ comprises two switches.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Currently amended) The battery charger of claim [[3]] 1, wherein the rectifier is selected from the group consisting of a full wave rectifier and a push-pull rectifier.

15. (Currently amended) The battery charger of claim [[3]] 1, further comprising a current mode controller for the base module[[s]], wherein the current mode controller regulates output current based on a command set from the master controller.

16. (Currently amended) The battery charger of claim 15, further comprising a voltage mode controller for the base module[[s]], wherein the voltage mode controller regulates output voltage based on a command set from the master controller.

17. (Previously presented) The battery charger of claim 16, further comprising a droop sharing control for the base module that ensures current sharing between the plurality of base modules.

18. (Previously presented) A battery charging system comprising:

a modular power stage configured to receive an alternating current (AC) input and provide a direct current (DC) output for charging a battery, the modular power stage comprising:

an inverter coupled to a rectifier circuit, the inverter having as its input an input voltage, the rectifier circuit having as its output a battery charging voltage;

an intermediate high frequency transformer intermediate the inverter and the rectifier to convert alternating current (AC) voltage from the inverter to a lower voltage input to the rectifier;

a current mode controller coupled to the output of the rectifier circuit and provides a current control signal for the modular power stage;

a voltage mode controller coupled to the output of the rectifier circuit and provides a voltage control signal for the modular power stage; and

a droop sharing control that ensures current sharing between a plurality of modular power stages under constant voltage operation; and

a system controller that interfaces with a plurality of the modular power stages and regulates power delivered by the plurality of modular power stages, wherein at least two of the plurality of modular power stages can be connected in parallel and regulated to charge the same battery.

19. (Original) The battery charging system of claim 18, wherein the switching circuit is controlled by a pulse width modulation (PWM) controller.

20. (Original) The battery charging system of claim 18 further comprising relays coupled to the output of the plurality of modular power stages to control output thereof.

21. (Original) The battery charging system of claim 18 wherein the system controller configures the plurality of modular power stages depending on battery charging needs.

22. (Canceled)

23. (Canceled)

24. (Previously presented) The battery charger of claim 17, wherein current sharing includes utilizing a highest current technique.

25. (Previously presented) The battery charger of claim 17, wherein current sharing includes utilizing an average current technique.

26. (Previously presented) The battery charger of claim 1, wherein the base module further comprises a relay to connect the at least two of the plurality of base modules in parallel.

27. (Original) A method for charging batteries using a plurality of modular battery chargers, the method comprising:

receiving an indication that a first battery is connected to a first base module;

if one or more batteries other than the first battery are connected to one or more base modules other than the first base module, performing the operations of:

(a) closing output relays of all base modules with batteries connected;

(b) identifying a base module with lowest discharged battery;

(c) closing the parallel relay of the base module with the lowest discharged battery;

(d) closing parallel relays of all base modules with no batteries connected;

(e) configuring base modules with closed parallel relays for parallel operation;

(f) setting up remaining base modules as stand alone chargers; and

(g) loading charging parameters into the base modules;

if no other batteries other than the first battery are detected as connected to one or more base modules, performing the operations of:

(a) closing an output relay of a base module with lowest discharged battery;

(b) closing all parallel relays to the base modules;

(c) configuring the base modules for parallel operation; and

(d) loading charging operations into the base modules;

starting a charging cycle.

28. (Original) The method of claim 27, wherein if a change in battery connections is detected before a charge cycle is completed, saving a last charge state and stopping charging.